



You are invited to comment on

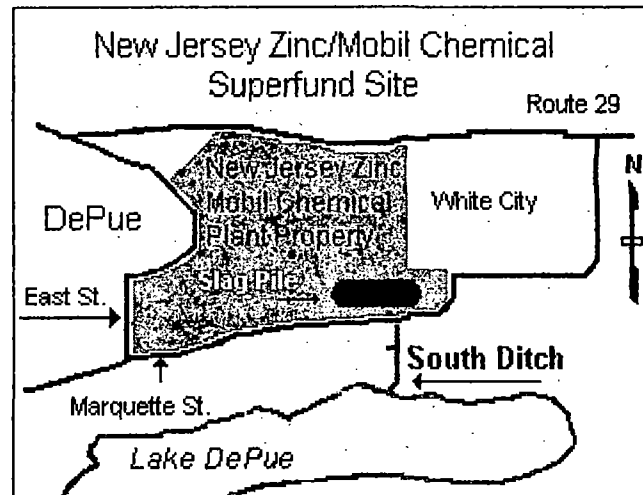
THE PROPOSED PLAN and OTHER REMEDIES CONSIDERED FOR THE SOUTH DITCH SEDIMENTS

NEW JERSEY ZINC/MOBIL CHEMICAL SUPERFUND SITE DePue, Illinois

What is the South Ditch? The South Ditch is a ditch between the plant property of the New Jersey Zinc/Mobil Chemical Superfund Site and Lake DePue. (For more information on the site, see page 7.)

Historically, the ditch has received runoff from the former plant property. Because of the nature of past plant operations, the runoff contained high levels of metals that contaminated sediments in the ditch. These contaminated sediments are called "unnatural" sediments.

In 1995, the State of Illinois and the potentially responsible parties (PRPs)¹ signed an interim consent order.² One of the requirements of that order was for the PRPs to investigate the sediments in the South Ditch and, if necessary, construct a remedy for the sediments. The PRPs completed the investigation in 1996.



Alternatives Studied for the South Ditch Sediments

The PRPs studied four main alternatives to remedy the South Ditch sediments. These alternatives are described on the next two pages. The Illinois EPA has designated one alternative (4b) as the Illinois EPA proposed plan. The public is invited to comment on all the studied alternatives as well as the proposed plan.

Costs are given in 1997 dollars, because the study of alternatives was conducted in 1997. All alternatives except Alternative 1 include institutional controls. In the short term, these controls would include "No Trespassing" signs and limited fencing. Long-term institutional controls could include restrictions on the deed of the property limiting certain activities such as excavation, swimming and fishing.

¹¹ The Superfund law specifies that potentially responsible parties are past and present owners and operators of the site. In this case, the potentially responsible parties are Viacom International Inc., ExxonMobil Corporation and Horsehead Industries, Inc. These three companies call themselves the "DePue Group." Since DePue citizens have expressed confusion about the name "DePue Group," thinking it belongs to a group of local citizens, this fact sheet will refer to these three companies as the potentially responsible parties (PRPs). The Illinois EPA oversees the work of the PRPs to ensure that samples are collected and other work is conducted as described in the Illinois EPA approved work plans.

² A consent order is a legally binding court order agreed upon by the parties entering into the order. The order lists the benefits and obligations of all the parties who signed the order. In this case, the consent order was filed in the 13th Judicial Circuit Court in Bureau County, Illinois. This order is "interim" because it covers only investigations, design of the remedy and certain actions such as the remedy for the South Ditch. A second order will be negotiated for the implementation of the overall site remedy.

- **The water now flowing into the ditch, including the spring water in the ditch, would be temporarily rerouted around the ditch.** In order for the sediments to be removed, the water now flowing through the ditch would be rerouted around the ditch and discharged into Lake DePue at another location for the period of dredging. The water could be temporarily diverted by a combination of interception trenches, shallow groundwater wells and piping in or near the springs.

Differences in methods of sediment disposal in sub alternatives 4a, 4b and 4c

- **Sub alternative 4a.** In this sub alternative, the PRPs proposed to transport the dewatered sediment to a nearby fertilizer plant. The zinc and copper in the sediment are valued micronutrients and would be added to the fertilizer being manufactured. The fertilizer plant withdrew their interest in the South Ditch sediments so this option was abandoned. The fertilizer plant subsequently closed.
- **Sub alternative 4b.** In this sub alternative, an interim containment unit would be constructed on the former plant property site for the sediment after the sediment has been dewatered in the settling basins and stabilized with fly ash, kiln dust or other additives. A permanent remedy for the sediment would be selected later, when the remedy for the entire site is chosen.

The interim unit would be constructed over an area of contaminated soil and groundwater on the former plant property. The sediment would be placed on top of a liner, such as recompacted clay and high-density polyethylene (HDPE), to prevent the metals in the sediment from being washed down into the soil below. An aggregate drainage layer such as gravel would be placed on top of the liner before the sediment is placed in the containment unit. Water draining through the sediment would be collected periodically from this drainage layer and sent to the water treatment plant already constructed and being operated by the PRPs. The water treatment plant was required by the interim consent decree and has been constructed by the PRPs to treat water coming off the plant property so the water meets state and federal regulations before it is discharged into the Illinois River.

To prevent rain from entering the containment unit, the unit would be covered with HPDE and a clay layer graded to shed water. The clay layer would be vegetated. The current thinking is that this containment unit will be located north of the zinc slag pile toward the west end. The actual location will be determined during the design phase of the project.

Estimated cost: \$1,895,000 (\$1,677,000 capital cost and \$11,000 annual O & M cost)

Months to construct: Less than six months.

- **Sub alternative 4c.** In this sub alternative, the sediment would be removed from the settling basins after it is dewatered, stabilized with a material like fly ash or kiln dust and shipped off site for disposal at a permitted, compliant, non-hazardous waste landfill.

Estimated cost: \$2,402,000

Months to construct: Less than six months.

Human and Ecological Risk Assessments of the Ditch Sediments

What is the concern with the sediments? There are two concerns. One concern is for human health. The second is an ecological concern; that is, a concern about plants and animals that may be affected by the ditch sediments. The following evaluation of the risk that the sediments might pose to human health and the environment is based on the 1996 investigation results.

Summary of Evaluation of Each Alternative Against the Nine Criteria					
Criteria	Alternative 1 Natural Recovery / No Action	Alternative 2 Enhanced Natural Recovery with Surface Water Diversion	Alternative 3 Above Grade Cap	Alternative 4b Removal with On- Site Consolidation	Alternative 4c Removal with Off- Site Disposal
1. Overall protection of human health and the environment	■	■	■	■	■
2. Compliance with ARARs	□	□	□	■	■
3. Long-term effectiveness & permanence	▣	▣	▣	■	■
4. Reduction of toxicity, mobility or volume through treatment	□	□	■	■	■
5. Short-term effectiveness	□	▣	■	■	■
6. Implementability	▣	▣	■	■	■
7. Cost	\$429,000	\$1,176,000	\$1,387,000	\$1,895,000	\$2,402,000
8. Support agency acceptance	The U.S.EPA has reviewed the components of Alternative 4b and supports its acceptance as the recommended alternative pending review of public comments.				
9. Community acceptance	Community acceptance of the recommended alternative will be evaluated after the public comment period.				
■ Fully Meets Criteria ▣ Partially Meets Criteria □ Does Not Meet Criteria					

Illinois EPA Proposed Plan

What is the Illinois EPA Proposed Plan? The Illinois EPA Proposed Plan is Alternative 4b, which is removal of "unnatural" sediment and consolidation of the sediment in an on-site interim containment unit. The public is invited to comment on this proposal as well as all alternatives studied.

Why does the Illinois EPA prefer Alternative 4b? Alternatives 4b and 4c are the only alternatives that meet both of the first two criteria. (See the above table.) In the Agency's opinion, 4b provides the best balance of criteria three through seven. Criteria 9 will be evaluated after the end of the public comment period.

What is the New Jersey Zinc/Mobil Chemical Superfund Site? A primary zinc smelter and other industrial processes were located at the New Jersey Zinc/Mobil Chemical site in DePue from the early 1900s until the late 1980s. See map on page 1 for the location of the site. The main concern at former zinc smelters is possible contamination with metals such as zinc, cadmium, copper, lead and arsenic. The purpose of the Superfund project is to evaluate whether past plant operations have affected the properties on or around the site and to remedy harmful effects, if necessary. The site was placed on the federal Superfund list in 1999. Superfund is the common name given to a list of the nation's most hazardous sites that are eligible for investigation and, if necessary, a remedy under the Comprehensive Environmental Response, Compensation and Liability Act.

For More information

Contacts: Virginia Wood, Illinois EPA Community Relations Coordinator at 1021 North Grand Ave. East, P.O. Box 19276, Springfield, IL 62794-9276. Her email address and phone number are Virginia.Wood@epa.state.il.us and 217/785-1269.

Rich Lange, Illinois EPA Project Manager at P.O. Box 1515, LaSalle, IL, 61301. His email address and phone number are Rich.Lange@epa.state.il.us and 815/447-2125.

The PRPs have asked that a contact for their group be listed. The PRP contact is Jim Frank, Frank and Cowles, 7226 N. State Route 29, Springfield, IL 62707, telephone number 217/487-7686.

Illinois EPA Web Page: Project fact sheets are also available on the Illinois EPA Web Page: <http://www.epa.state.il.us/community-relations/fact-sheets.html>

Repositories: The Illinois EPA has placed project documents and fact sheets in the Selby Township Library in DePue for public review (815/447-2660). Please call for hours.

TECHNICAL ASSISTANCE GRANTS

Citizen groups desiring technical assistance in interpreting data from the New Jersey Zinc/Mobil Chemical investigations may be eligible for a Technical Assistance Grant (TAG). The TAG is a U.S.EPA program that provides up to \$50,000 per site to community groups wishing to hire consultants to interpret data generated during a Superfund investigation. Twenty percent of the total funding amount must be provided by the group. These funds may be paid in cash and/or by using in-kind services. TAGs cannot be used to duplicate field or laboratory work. Their purpose is to give the public a better understanding of existing documents and site activities.

Municipalities, other governmental agencies, political subdivisions, potentially responsible parties, academic institutions and headquarters of public interest groups are not eligible to receive TAGs. However, members of these groups may belong to a community organization requesting a TAG.

Additional information about TAGs is available by contacting Susan Pastor, TAG Coordinator, U.S.EPA, P-19J, Office of Public Affairs, 77 West Jackson, Chicago, IL 60604. She can be reached at 1-800/621-8431 or 312/353-1325. Her e-mail address is Pastor.Susan@epa.gov TAG information is also available on the U.S. EPA web page at www.epa.gov/superfund/tools/tag